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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/035,206	01/04/2002	Peter Jenkner	211930US0	3471

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EXAMINER	
PADGETT, MARIANNE L	

ART UNIT	PAPER NUMBER
1762	

DATE MAILED: 08/05/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/035,206	JENKNER ET AL.	
	Examiner	Art Unit	
	Marianne L. Padgett	1762	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on 13 May 2004 and 11/28/03

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 1,4-8,10,11 and 14-16 is/are pending in the application.

4a) Of the above claim(s) 14-16 is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) 1,4-8,10 and 11 is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date 11/28/03
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

1. This application contains claims 14-16 drawn to an invention nonelected with traverse in the reply filed on 8/12/03. A complete reply to the final rejection must include cancellation of nonelected claims or other appropriate action (37 CFR 1.144) See MPEP § 821.01.

2. Most of the 112 problems discussed in the last action have been removed by the amendment, and the inclusion of the limitations of original claims 2, 3, 12, and 13 in independent claim 1 removes the obviousness double patenting, as well as the rejections using Takai et al (6,207,621 B1) or Ogawa et al (5,437,894).

3. Claims 1, 4-8 and 10-11 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The Markush group of claim 1 remains improper, because plasma pretreatment and glow discharge are not mutually exclusive species as required, since the latter is a subset of the former.

Also note that applicants have informally capitalized the "P" in "Pretreating" on line 3 of the 5/13/04 amendment.

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various

claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

5. Claims 1, 4-8 and 10-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Taniguchi et al (6,207,621 B1), optionally in view of Kai (5,580,606), as discussed in sections 7, 8 and 9 of paper #(20031023), mailed 11/13/03.

Applicant's inclusion of the specific pressure range of original claim 3 removes Taniguchi et al from being a 102 reference, however as noted previously this primary reference teaches various type of plasma (corona, D.C., L.F., H.F. or microwave) employed under reduced pressure in gases such as nitrogen, Ar, oxygen, etc. It would remain obvious for one of ordinary skill in the art to determine the optimum pressure for the particular type of plasma pretreatment process employed, as well as that plasma's effect on specific polymeric substrates, as one would reasonably expect a fair amount of variation of affects achieved with a specific pressure dependant on the energizing technique used to form the plasma. In applicant's claims, which are inclusive of all types of plasma employed by Taniguchi et al., as well as light (electromagnetic waves) from any source or flame, the pressure range has even less specifically determinable effect for the broader range of options.

Furthermore, as noted previously in the last action, Kai who is performing an analogous pretreatment of polymer substrates, employs microwave plasma therefore, which is one of Taniguchi et al's specifically mentioned types of useful plasmas, with the example pressure of

0.14 mbar (col. 6, line 13) falling squarely in the claimed range, showing for a least the taught microwave plasma the claim pressure range was known to have been useful for taught and claimed purposes.

On page 6 (bottom) of applicants' response, they allege "that the unobviously superior results obtained by the practice of the claimed invention rebuts any possible prima facie case of obviousness conceivably engendered by the references "(emphasis added), something whose superiority is not obvious hardly rebuts anything. However, assuming that is a typographical error and applicant's intended to argue for obvious superior result, they have failed to cite where or how any results are superior to the products produced by the process of Taniguchi et al, hence their allegation, however it was intended, is lacking in clear meaning and support. Given that the only difference in the independent claim from Taniguchi et al, is reduced pressure (general) verses the specific claimed range of 0.001 mbar to 0.99 bar (or about 7.5×10^{-4} to about 743 Torr), which is quite broad range covering pressure from just below atmospheric to fairly high vacuum, i.e. most pressures that Taniguchi et al might possibly employ for the taught "reduced pressure", it is not evident how this broad range of pressures could necessity any results differing significantly from those of Taniguchi, such as to produce the alleged [obviously] "superior result" that is not specified in the arguments.

6. Applicant's IDS of 11/28/03 is made of record, and Ogawa et al, the only one in English, so examiner can read it, is noted to be of interest for coating numerous substrates, including plastics as claimed in 10, with fluoroalkyl silicon compounds including silanol-containing as in claim 11 (abstract; p. 3, lines 42-47; p.4, lines 15-56; p.5, lines 19-49; and Ex 3 on p.8), however the taught pretreatment requires use of oxygen in a plasma or corona

atmosphere, thus overlaps with the option of "air", as the gas in applicants' independent claim, however the example shows that there is no heating step required with or after the deposition of the fluoroalkyl silane, which is chemically adsorbed at room on the treated polycarbonate substrate.

7. Other art by overlapping inventors, directed to relevant fluoroalkyl silicon coating compositions include Jenkner et al (6,713,186 B1) that is copending; Standke et al (6,288,256 B1 and 6,288,936 B1) which are within a year of this application's filing date, hence not prior art; as wall as prior art patents Jenker et al (5,869,728) and Standke et al (5,808,125, 5,863,509 and 5,849,942), which while teaching use of claimed materials for coating plastics, with the Standke et al references providing examples that heat to claimed temperatures after immersion coating, do not require any pretreatment step before immersion in coating material.

8. Applicant's arguments filed 5/13/04 and discussed above have been fully considered but they are not persuasive.

9. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

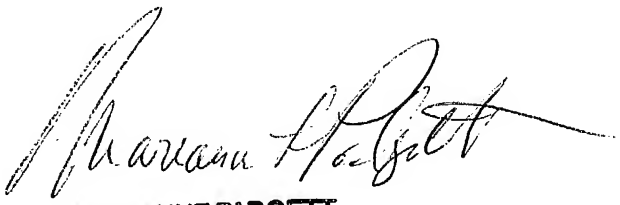
however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to M L. Padgett whose telephone number is (571) 272-1425. The examiner can normally be reached on Monday-Friday form about 8:30 am to 4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Shrive Beck h can be reached on (571) 272-1415. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

M. L. Padgett/af
July 28, 2004
August 4, 2004



MARIANNE PADGETT
PRIMARY EXAMINER